142 The skin colour in adult Choroti is brown, newly born children have light yellowish-brown skin, but it soon gets darker, so that even rather young children, figs. 21 and 22, seem to be of a very dark colour. The hair is lank, and the iris dark brown. From Lehmann-Nitsche's and my own anthropological observations I have compiled the following table.

The Choroti: some physical features.

[141]

Sex	Average height, cm	Shape of skull	Skin colour, von Luschan's scale	Hair colour, Fischer's scale	Iris, Martin's scale
Men.....	[1] 161.6 [2] 170.0	Dolichocephalic, predominantly	22, predominantly	4, predominantly	4, predominantly
Women ...	[3] 155.3 [4] 152.0	Dolichocephalic, predominantly	18, predominantly	4, predominantly	4, predominantly

145 [805] As the Choroti do not keep count of the age of their children, nor of their own, it is impossible to obtain, by direct questioning, from these Indians any information as to the relation of puberty to age in individuals. One of our Creole servants, who had lived a long time on the Chaco, has, however, told me that Indian children arrive early at physical [582] development (fig. 24), and that the girls are considered marriageable after their first menstruation, which, according to my informant, occurs at the age of ten to twelve. And, according to the same person's statement, the boys are ripe for marrying at the age of about fifteen. The blossoming-time of the women is very brief, and as they grow old they often become repulsively ugly. It is notable that the old women, as a rule, were thin of body, whilst elderly men often were inclined to stoutness.

[621] 361 The Choroti live together in villages. The selection of the village site depends primarily on the supply of water and food, and, in the case of cattle owning Indians, also on grazing conditions. Often the huts are built alongside shade-giving trees (fig. 25). The fan palm found in the [824] Chaco (Copernicia australis), (fig. 10,) being valuable to the Indians on account of its easily worked wood, its pith (used for food), and its leaves

[1] Acc. to Lehmann-Nitsche's measurements of 30 individuals.
[2] » » the Author's » » 10 »
[3] » » Lehmann-Nitsche's » » 10 »
[4] » » the Author's » » 13 »

[text continues on p. 37]

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

(material for roofing huts), the Indians are apt to build their villages in the proximity of some grove, or forest, of palms (›palmar‹). As a case in instance, the Choroti village at Tatarenda was situated quite close to a palm grove, and not very far from a largish palm forest. It is of importance that algaroba trees should be growing in the neighbourhood, as the fruit of this tree plays a prominent part in the food arrangements of these Indians.

The huts are of a very primitive character, and are built in the following manner; With a digging-stick (fig. 27) of hard, heavy wood, a succession of holes is dug, or jabbed, in the ground, so as to form a circle with a diameter of 2 metres or upwards. In each of these holes is planted an unlopped, bent-grown branch, thick end downwards, so that the tips of the branch point towards the centre of the circle. By this means a cupola-shaped frame is formed (fig. 26). This frame is covered with a thick layer of palm leaves and grass (figs. 16, 25), unless palm leaves are difficult to obtain, when the hut will be covered with grass only, although huts thatched in this way have less rain resistance. But even the most carefully built Choroti huts are, however, poor enough dwellings which, in any heavy downpour of rain, are unable to keep those inside them from a wetting.

Fig. 18. A man holding a pestle in his hands. Choroti. Gran Chaco. Bolivia. Photo. E. v. R.

The huts have one, or even two, entrances, about one metre in height (figs. 16, 25), but huts of the largest size are sometimes provided with several entrances. A sort of porch, constructed of branches and grass, may occasionally be built out from the entrance. When several huts are close together, they may not unfrequently be connected with each other by means of covered passages, or tunnels, built similarly to the huts.

The latter do not contain many utensils. Ranged along the wall, bowls made of gourd shell, a few clay vessels and a wooden mortar, are generally seen. In prettily knitted net bags of spun caraguatá fibre,[1] the Choroti keep all manner of small articles, such as mussel-shell spoons,

[1] Caraguatá, or chahuar (chaguar), Bromelia serra, is, as I have already pointed out, especially common in the Chaco.

wooden sticks for fire-drilling, toilet articles, magic rattles, etc.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

Fig. 27. Wooden digging-stick (wood of Bulnesia sarmienti). The handle and the spade-like point are flat, the rest, of round section. Choroti, Gran Chaco, Bolivia. 1/4. Riksm. 10. 3 84.

a secondary one.[1] In Central Africa I have seen Wemba and Bisa men construct food-storing racks for smoking food, or drying it by fire. These racks are built on exactly the same plan as the cooking-sheds of the Choroti, although lower than the latter, and not covered with grass. That also the Indians of South America made use of drying or roasting racks, is evident from fig. 29, provided that this picture, reproduced from an account of travel in the 16th century,[2] actually is a faithful representation of an Indian roasting-rack.

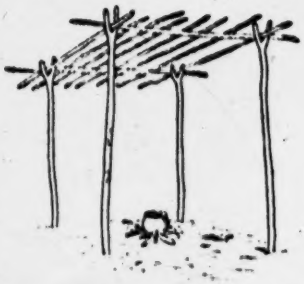

Fig. 28. Frame of cooking shed; also used as a food rack. Choroti, Gran Chaco, Bolivia. From Erland Nordenskiöld.

The roasting-rack, such as it is reproduced above, may conceivably be a development of the food-storing rack discussed by me in chapter VII (pp. 198, 199), and in the following way: Those usually fairly tall racks that are built for the protection of food against damage from wild or domestic animals, are, as a rule, particularly well adapted for drying fish, etc. When the weather is unfavourable to sun-drying, the idea would present itself of assisting the preserving process by making a fire under the rack, by means of which the food would dry more quickly, at the same time that, through the action of the smoke, it would keep longer from decomposition. By lessening the height of the rack, in the way shown in fig. 29, the effect of the fire would be increased so much that the food would quickly be cooked, and ready for immediate consumption.

When the Choroti quit a dwelling-site in order to build their village elsewhere, they often burn their old

[1] Cfr. my theory as to the origin of pile-building construction, pp. 193—199.
[2] Schmidel (1), p. 29.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

361 huts. With other Chaco tribes the same custom prevails. Thus, for instance, the Mataco Indians burnt their huts on the Pilcomayo when they had learnt from spies that I, with a few Bolivian soldiers, was marching in a direction towards their village. When I arrived at the site of the village, I found, instead of huts, only a number of smoking ash heaps. In times of epidemics, when there are many deaths, it is the Indian custom to burn, and abandon, their villages. It also happens that a village is burnt after having for the first time been visited by a white man.[1]

[1] Karsten (2), p. 30.

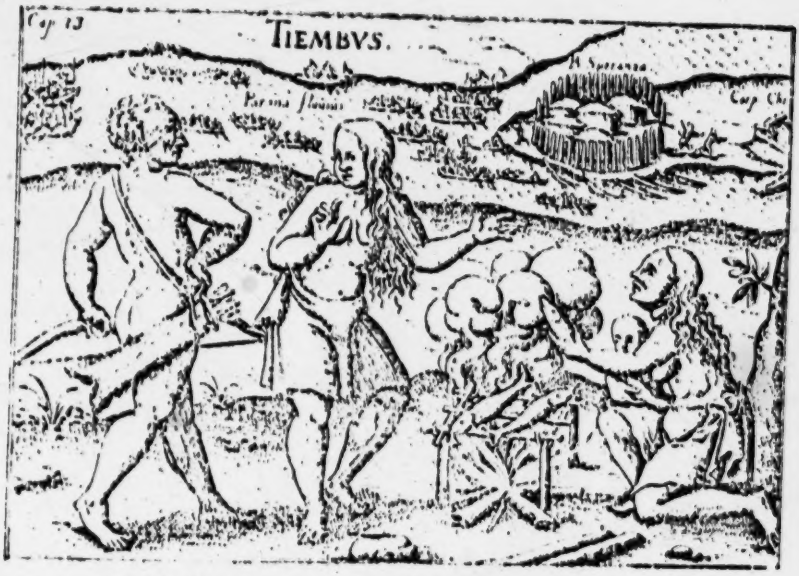

Fig. 29. Tiembus Indians, roasting fish on the Paraná river. From Schmidel.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6
Toba. 5112

tive fashion, and, according to Nordenskiöld and Karsten, such agriculture as the Choroti engage in, is still on a very inconsiderable scale. Nowadays, however, these Indians cultivate — although not to any great extent — the following plants, viz.: pumpkins, cucumbers, water melons, maize, beans, manioc, sweet potatoes, tobacco and cotton.[1] Their only agricultural implements consist of digging-sticks of hard, heavy wood, and a kind of paddle-like, wooden spades. A typical digging-stick is reproduced in fig. 27.

It is probable that the Choroti originally had no other domestic animals than dogs, and the only tame animals I personally saw among this tribe were dogs and fowls. Those of the Choroti Indians who are living in the neighbourhood of the Pilcomayo possess, beside the animals mentioned, also sheep, goats, cattle, horses and cats. Sheep-rearing has now come to be of great importance to the Indians, who use the wool as material for mantles, fillets, etc.

Fig. 121. Cord on which fish are strung by means of a large needle of hard, heavy wood. This kind of carrying-gear is very common among the Choroti. The specimen here reproduced originates, however, from the Toba (neighbours of the Choroti). Gran Chaco. Bolivia. S:s. Riksm. 03. 3. 766.

As mentioned, the Choroti are a nomadic people. Their changes of location may be due to various circumstances. When pasture is exhausted in one place, they must look about for another; they move on to more profitable fishing-waters, or wander into regions that are rich in game and wild, edible plants. But there may also be other, and quite different, reasons for the Choroti's leaving their old abodes. In epidemics, when deaths are plentiful, it happens that the Choroti abandon their villages, and this they may also occasionally do if they are apprehensive of visits from whites (see pp. 47 and 48). In a first-rate monograph, Dr. Ragnar Numelin has exhaustively analyzed the causes governing the nomadic instinct in primitive peoples. As re-

[1] Nordenskiöld (11), p. 29.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

361 166 gards the Choroti, he, on Karsten's authority, mentions the interesting fact that these Indians sometimes are compelled to make a change of dwelling-site only on account of the appearance of excessive swarms of noxious insects (principally locusts).[1]

484 464 It is only in later times that the Choroti to any greater extent have come in to work on white men's sugar plantations. These plantations are mostly situated in Argentine territory, and therefore the Indians often have to make journeys of several weeks, in going to, or returning from, their place of work. Such Indians as go to the plantations only work for a few months for the whites, and then return to their own locations, there to spend the rest of the year in the wilds of the Chaco. Whilst at the plantations, they live in Indian villages they build for themselves, and in many ways carry on their primitive life.

166 I will also mention two other reasons for migration; now, however, only seldom obtaining among the Choroti, viz., fear of other Indian tribes and of reprisals for misdeeds committed against the whites. Concerning the latter cause for migration, I have already mentioned that a part of the Choroti tribe disappeared into the interior of the Chaco, after having in some way transgressed against white people who had settled in their country.

439 The Choroti Indians also engage in trading, and their chief article of barter is dried fish. In the Pilcomayo they are able to catch more fish than are required for their own consumption, and they therefore dry the surplus and take it to other parts, inhabited by Chiriguano and Chané, where fish is less plentiful. These latter Indians buy the fish by giving in exchange maize, red colouring-stuff (for face-painting) and other articles. Nowadays the Choroti also obtain iron, clothing, and other wares, by trading with the whites at the sugar plantations.

The snail-shell spangles that have been described in the foregoing are an important article of trade in the Chaco. The Choroti, according to their own stating, obtain spangles — separate, as well as strung into ready-made necklaces — from tribes living in the eastern Chaco. On Rio Parapiti Nordenskiöld has seen spangles of this kind among the Tapiete Indians, who told him they had got them by barter from the Ashluslay, and the latter that they, in their turn, had obtained them

[1] Nuttelin (1), p. 35.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

273 has to take part if he wishes to keep on good terms with the Indians. — »Among the Ashluslay I have taken a hand in several large-scale drinking carousals, and among the Choroti in some smaller ones. It proved an interesting experience, but it required a great deal of fortitude to be able to go through with it. In most villages there is a special [361] place set apart for drinking. There the men begin to foregather about noon, each man bringing his sitting mat and his calabash bowl of a capacity of two to three litres. Huge calabashes of beer are brought by the women. Sometimes the beer is decanted into a large earthenware vessel, out of which it is served. At a festivity where old man Aslù was the host, algaroba beer was handed round to the guests in a genuine European night-chamber, of well-known shape. What lees or dregs there may be in the beer receptacle, the partakers simply fish out with their hands, and then strain between their filthy fingers.

[276]

[574 576]

Fig. 153. Tobacco pipe of bamboo. The figure shows the mouthpiece turned downwards. Choroti. Gran Chaco. Bolivia. 1/1. Riksm. 03. 3. 238.

»A guest, especially if he has the misfortune of being very popular, is very well treated. He is provided with a sitting mat and a calabash holding two or three litres. When he sits down, all wave to him with the flat of the hand, and he must make a similar response. That constitutes the greeting of welcome. After that, it is a matter of drinking, for here the motto is 'no heeltaps', and one must not be uncivil. When one has managed to get a litre down, without throwing it some more the palm-waving is done. The old men sitting next to one, draw their more or less dirty fingers across one's mouth. This is the height of friendliness. If, after all this, one has to run away for a moment, one must by no means forget to wave the hand to one's neighbours and say 'paa', for if not, one is exceedingly unmannerly. The worst of it is that one must come back, and hold out, right through the feast even, whilst one's hosts are drunk and yelling, making speeches, spitting in the festive bowl, and generally feeling themselves good and hearty. Without giving a wipe to the pipe-stem, one has [276] to smoke, turn and turn about, with dirty, slavering, old men.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

better part of an hour, and when I was allowed to put on my clothes again, my body was full of large, red, marks from the sucking. The two worthies entertained me during the whole doctoring process with a lively conversation which I did not understand. From the pantomimic show I could, however, gather that it was a consultation. For a fee I gave one of the physicians a shirt and the other a pair of tight-fitting drawers.»[1]

As mentioned before, in case of illness the Choroti try to back up the work of the medicine man by dancing; such dancing is then regarded as magically counteracting the influence of the spirit of the illness.[2] The spirit of the illness is by the Choroti called »mohsek ihitek», i. e., the arrow-shooting spirit, which, as I have pointed out in the foregoing, signifies that the Indians believe that the »mohsek» in question has the power of causing illness by arrow-shot. The belief that illnesses could be caused by »fairy-darts» is met with among a number of different peoples, and, as we know, was formerly common also in Sweden.

The Choroti also try to cure themselves of illnesses by internally taking medicines consisting of decoctions of herbs, etc. It is, nevertheless, possible that the Indians themselves regard these, which we consider natural, remedies as being magical.

When an epidemic disease causes many deaths in a Choroti village, it is the practice of the Indians to burn the huts and remove to another site. This they do, either from fear of the spirits of the dead,[3] or in order to dodge the attack of the spirit of the disease.[4]

On the death of her husband, a Choroti widow cuts off her hair and burns it, and paints her face black with soot. We may take it that these signs of mourning also are of magical import. As an instance of this, the Choroti say that widows cut off their hair so that it shall not be a means of their husbands' spirits molesting them.[5]

One evening when after a long day's shooting I arrived at the Choroti village situated near our camp at Tatarenda, I was met by the sound of monotonous singing, muffled drumming, and the noise of magic rattles.

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[1] Nordenskiöld (13), pp. 95 and 96.
[2] Karsten (1), p. 14.
[3] Karsten (3), p. 30.
[4] Cf. Karsten (1), pp. 32 and 33.
[5] »When I asked the Choroti why a widow cuts and destroys her hair, I received the answer that the dead husband, who wants his wife to follow him to the grave, is believed to attack her through the hair; in order to rid herself of this danger she shaves it off.» Karsten (4), p. 62.

/1 cont./

000 the Sociedad Cientifica del Paraguay. Having also visited
C the Churupí Indians at the mission near Lake Escalante, about
A 25 kilometers from the mission at Esteros, I continued my
M journey on September 5 as far as Linares, where I found a num-
114 ber of Mataco Indians, who in part lived in a town some seven
M kilometers from Linares and in part had come from the other
[361] side of the Pilcomayo River to Linares.

C /2/ On September 9 I left Linares and on the next day
A arrived in Guachalla, from where I visited the Churupí camp
114 /tolderia/ about seven kilometers away.
A
[361] On September 11 I left Guachalla for the fort of Cururenda,
C where I had the occasion to see the Chorote /Choroti/ Indians,
CI who were living in a camp some three kilometers from
114 Cururenda, as well as some Toba and Mataco, who came
CI from the other side of the Pilcomayo to Cururenda.
[361]

C On September 15 I continued my journey as far as Oruro,
T in the environs of which I visited the Tapieté. My escort,
114 Lieutenant Cabello, who knew these Indians well, took me to
T their two camps, one of which is 15 and the other 32 kilo-
[361] meters from Oruro.

C On September 19 I left Oruro, and passing through
114 Capirendá and Carandayty, in the company of Lieutenant
Díego Corvalan, I arrived in Machareti, where I remained
from September 21-25. Since Machareti is a Chiriguano
town, I had a good chance at this place and at the end of my
journey, to observe this interesting Indian tribe.

Beginning my return on September 25, I passed in succes-
sion through Capirendá, Carandayty, López de Filippis, and
Puerto Casado, arriving in Asunción on October 8.

C Thanks to the great help of the military authorities, it was
[122] possible for me to pass through large areas of the Paraguayan
Chaco during the relatively short time of two months, to get
acquainted with a large number of native tribes of the Chaco,
to take photographs of these tribes, and to make up vocabularies
000 of their different languages. Outside of the Toba, whom I met

2: Karsten E-5 (1911-1913)1932 S17 Mataco S17

Choroti SK6

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Choroti and Toba Indians is not so rich as I wished it to be, nor have I been able to realize my plan of returning later to Chaco for the sake of completing it. My next great expedition took me to the Indians of the Amazon territory. However, I think the new facts I have been able to gather relating to their general sociology, their customs and beliefs, magic dances, etc., form an important contribution to our knowledge of the intellectual culture of the Chaco Indians, so strangely neglected by earlier ethnographical travellers. In fact, the dances of the South American Indians have never before been the object of detailed studies. The Chaco culture has in many respects a character of its own, differing markedly, for instance, from the cultures peculiar to the tropical virgin forests in northern South America. Taken as a whole it is much poorer; neither the material nor the intellectual culture in these inhospitable regions has attained the same stage of development as in the regions better endowed by nature. Even the rites and ceremonies in which religious life finds expression among the Chaco Indians are comparatively few.

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The Choroti are split up into three minor tribes which are settled in different parts of the territory occupied by these Indians. One of these sub-tribes lives on the left bank of the Pilcomayo just in latitude 22° S. and a few leagues to the north of it. Their chief at the time when I lived among them was Toula. A second sub-tribe lives about ten leagues east of them in the interior of the country. In March 1912 I undertook an expedition to these Indians, who had never before been visited by a European. Two Choroti Indians accompanied me as guides, and without them it would have been impossible to find one's way through this maze of shrublike forest land, broken here and there by small open plains. Whereas the country adjacent to the great water source Pilcomayo is fairly fertile, the soil in the interior is too dry and sandy to be suitable for cultivation. Agriculture is practised by the Choroti of the interior on a still more modest scale than by the river Indians, and since they are poor hunters their life must be extremely hard at those periods of the year when there are no wild fruits. These Choroti, like the rest, live in small communities and their total number does not exceed a few hundreds. Their chief at that time was a comparatively young man called Anempā

The third and largest Choroti tribe is found within a few leagues of Fortín Guachalla, the Bolivian military settlement mentioned before. These Indians only live on the banks of the river during the dry season, when the scarcity of water renders life in the interior impossible. The

2: Karsten E-5 (1911-1913)1932 S17 Mataco

Choroti SK6

necessity of fishing also at that time compels them to stay near the river. 614
But as soon as the rainy season sets in and the algaroba, tusca, and other 361
fruits begin to ripen, the Indians take up their abode in the forest close by some small lagoon or a rare water-hole several leagues from the river, spending most of their »summer» time in drinking algaroba beer, feasting, and dancing. The Indians of the Guachalla region form the main bulk of the Choroti tribe and number about a thousand individuals. Their [648]
immediate neighbours in the south are the Ashluslay, to whom the Choroti are closely related in their culture. There is much communication between the two tribes and intermarriage is frequent. Thus the chief of the Choroti, the old Ātamo, was on his father's side of Ashluslay descent, but since [611]
mother-right prevails among the Chaco Indians, he had become a member of the Choroti tribe.

There seems to be a certain antagonism between the different Choroti 619
tribes, in consequence of which they have very little intercourse with one 184
another. I particularly noticed such an antagonism between those Choroti who live on the river and those living in the interior. It would have been impossible for me to get a guide among the people of the chief Toula to accompany me to Anempä's tribe. Since to these Indians, who in general live to a great extent by fishing, the possession of the river is of great importance, I suppose it is originally due to this enmity that some Choroti Indians have settled in the inhospitable regions in the interior where they are found to-day. These latter even speak a somewhat differ- [197]
ent dialect of the Choroti language. Thus, one of the commonest words in the language, the word for 'house', is in the dialect of the river Indians *uk*. in the dialect of the inland Indians again *sáuo*.

The Choroti living on the river call the Choroti tribe inhabiting the interior of the Chaco *Asówa*.

The total number of the Choroti I estimate at about 2,000 or a [161]
little more.[1]) The surrounding tribes are much larger. Of these I have 648
already mentioned the southern neighbours of the Choroti, the Ashluslay, whom the Choroti call *Ahle*. Their neighbours in the north are the Tobas, whom they call *Johlōki*, and another Chaco tribe, the Tapiete, whom they call *Ohuénik*. Their neighbours in the west again are the Mataco, whom the Choroti call *Hotenúk*. They have dealings with all these tribes, although at times they have been at war with them, or at

[1]) Consequently, when Nordenskiöld estimates the Choroti at 4,000 individuals, this is a great exaggeration.

2: Karsten E-5 (1911-1913)1932 SI7 Mataco SI7
Toba SI12
Choroti SK6

M 342 against rain and wind. In these huts the Chaco Indian spends most of his time, sitting or lying on the ground or on the goat or sheep skin which forms his most important personal property. In the daytime, however, if the weather is fine, he prefers to stay outside the house engaged in various occupations or in eating or drinking, and in the summer time when no rain is falling and the temperature is high, he frequently even passes the night in the open air.

M T 342 177 Whereas primitive huts of this type are still customary among the Pilagá and other Argentine Tobas as well as among distant Mataco tribes, the Mataco and Tobas on the Bolivian side nowadays make houses of the same form as the whites, constructed of beams or balks with walls of cane and roofs of twigs and grass. Still these houses are so badly built that it is no rare thing to see a passing whirlwind sweep off the roofs and damage the walls.

C M 361 A Choroti or a Mataco village consists of six to twelve huts, generally arranged in a circle round an open space which serves as a field for games and as a tethering place for the small flocks of sheep and goats possessed by the Indians. In the middle of this space there is usually a shady algaroba tree under which the men of the village assemble for deliberations and where the drinking-bouts take place. In building their settlements the Indians first of all make sure of the existence of water in the neighbourhood, be it the river Pilcomayo itself or one of those insignificant pools which are found here and there in the interior of the Chaco; secondly, the place must offer the necessary pasture for their flocks; and thirdly, the Indians always settle in the vicinity of a forest where they can find plenty of the wild fruits on which they to a great extent subsist, and the trees of which offer some protection against the burning rays of the sun during the hottest hours of the day. Further, being anti-social and shy, the Indians preferably chose for their settlements a place hidden away from the main track. Seldom or never are they found close to the banks of a river: generally one has to travel one or a few miles into the interior to find their villages.

C M T 361 The villages of the Tobas and the Ashluslay are generally larger than those of the Choroti and the Mataco because the tribes are larger, but they are arranged on the same principles. All Chaco tribes live in village communities — this is a feature which differentiates these tribes from those of the tropical virgin forests. The vast pampas regions, of course, favour the rise of larger societies, whereas in the great virgin forests the different families necessarily live scattered.

2: Karsten E-5 (1911-1913)1932 SI7 Mataco

Choroti SK6

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Choroti Indians outside their house.

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The open space in the middle of the Choroti village, with a drum placed to the left.

The woman in the middle has a leather strap tied round the chest as a sort of charm against evil spirits.

2: Karsten E-5 (1911-1913)1932 SI7 Mataco

Choroti SK6

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Preparations being made for the great drinking-feast among the Choroti.
A goat's hide is fixed in the ground so as to form a vessel,
in which the beer is brewed.

000

Choroti Indians assembled for a drinking-feast under a shady algaroba tree.